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(54) Title: CIS-PRENYLTRANSFERASES FROM THE RUBBER-PRODUCING PLANTS RUSSIAN DANDELION (*TARAXACUM KOK-SAGHYZ*) AND SUNFLOWER (*HELIANTHUS ANNUUS*)

(222) 222 230 240 250 260 270 280 290 300 310 329
SEQ ID NO: 4 (179) ATSSSHETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 6 (58) AHSSEHETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 8 (162) CHSTIDETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 9 (162) CHSTIDETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 10 (162) CHSTIDETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 12 (178) HSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 11 (204) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 14 (216) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 15 (138) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 16 (184) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 18 (147) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 20 (161) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 22 (198) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 23 (165) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 25 (198) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
SEQ ID NO: 26 (120) STSTSTSTETPRTHACBSIR---VWNGNG-----FFNGSG---YDWNHGSQAVIRVTHKHMVMGVDELH...
Consensus (222) YSGR EIV AVK S K G
(SEQ ID Nos 27 and 28)
I RI L D E L N F P D L L I R T S G R L S N F L I A Q T A Y

(57) Abstract: This invention pertains to nucleic acid fragments encoding plant cis-prenyltransferases. More specifically, this invention pertains to a cis-prenyltransferase homolog from latex of the rubber-producing plant species *Taraxacum kok-saghyz* (russian dandelion) and a cis-prenyltransferase homolog from the rubber-producing plant species *Helianthus annuus* (sunflower).

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